

REMARKS

Claims 1-5, 7-11, 13, and 15-19, all the claims pending in the application, stand rejected on prior art grounds. Applicants respectfully traverse these rejections based on the following discussion.

I. The Prior Art Rejections

Claims 1-5, 7-11, 13, and 15-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Moore, et al. (U.S. Publication No. 2003/0092438), hereinafter referred to as Moore, in view of Sinander, et al. (U.S. Patent No. 6,385,770), hereinafter referred to as Sinander, in further view of Schroder, et al. (U.S. Patent No. 7,107,329), hereinafter referred to as Schroder. Applicants respectfully traverse these rejections based on the following discussion.

The claimed invention provides a method for revising a software application used by a plurality of nodes in a computer network, wherein the software application utilizes persistent data. In the rejection, the Office Action argues that Moore discloses upgrading and downgrading software. Nevertheless, nothing within Moore teaches or suggests that the software understands *both* old and new persistent data structure formats. Instead, Moore merely discloses converting data to the “new version format” if the system is upgraded. Moreover, when the system is downgraded, Moore discloses installing new application software or hardware. Therefore, as explained in greater detail below, Applicants respectfully submit that the prior art of record does not teach or suggest the claimed invention.

Applicants traverse the rejections because the proposed combination of Moore, Sinander, and Schroder fails to teach the claimed features of “applying an upgrade to a first next level of software that understands both old and new persistent data structure formats; ... applying an upgrade to a second next level of software that understands both said old and new persistent data structure formats; ... [and] applying a downgrade to a first previous level of software that understands both said old and new persistent data structure formats”. Such features are defined in independent claims 1, 7, 13, and 15 using similar language.

The Office Action asserts that such features are disclosed in Moore. Specifically, the Office Action argues that Moore applies an upgrade to a next level of software and a downgrade to a previous level of software (Office Action, p. 4, item 8). However, nothing within Moore teaches that either the “next level” or the “previous level” of software *understands both old and new persistent data structure formats* (independent claims 1, 7, 13, and 15).

Instead, Moore merely discloses converting data to a “new version format” if the system has been upgraded. More specifically, as discussed in paragraph 0024 of Moore, at a step 118, the system 50 determines if the replica state data needs to be converted (i.e., the new application is an upgrade). If the replica state data needs to be converted, indicating that the system has been upgraded, a step 120 converts the data to the new version format.

Nevertheless, nothing within Moore discloses that the “application” that is upgraded can understand both new *and old* persistent data structure formats. Instead,

Moore merely discloses converting data to the “new version format” if the system is upgraded.

Furthermore, although Moore discloses “downgrading”, nothing within Moore teaches downgrading software that “understands both old and new persistent data structure formats” (independent claims 1, 7, 13, and 15). Instead, Moore merely discloses installing new application software or hardware when the system is downgraded.

Specifically, as described in paragraph 0022 of Moore, an upgrade or downgrade of service generally entails the installation of new application software or hardware on the secondary controller 54. At a step 102, the secondary controller 54 has its application software or hardware 64 upgraded (i.e., the application is updated to a newer release), or downgraded, (i.e., the application has an older version installed). Nevertheless, nothing within Moore teaches or suggests that the “software or hardware 64” (that is either being upgraded or downgraded) understands both old and new persistent data structure formats (independent claims 1, 7, 13, and 15).

To the contrary, paragraph 0039 of Applicants’ disclosure describes communication between nodes. While upgrading the software version, it is possible to have two nodes temporarily operating with different software levels. For example, assuming a first node has software level $X+1$ and a second node has software level $X+2$, then the first node sends the second node a communication packet with format D. Here, software level $X+2$ on the second node understands both communication packet structures but in a conversion step converts the communication packet from format D to

D*. Hence, the communication packet structures can now be used, as the rest of the software, which is at level X+2, expects format D*. If the second node has to send a response to the first node, it uses communication packet structure format D*. Software level X+1 on the first node understands both communication packet structures but in a conversion step converts the data from format D* to D. Again, the communication packet structures can now be used as the rest of the software, which is at level X+1, expects format D. In this way, the method enables nodes in the distributed system 500 to continue communicating with each other, even when the nodes operate at different software levels. Without this capability, inter-node communication would be stalled until all the nodes are updated with the same software level.

Accordingly, Applicants submit that although Moore discloses upgrading and downgrading software, Moore fails to teach that the software understands *both* old and new persistent data structure formats. Instead, Moore merely discloses converting data to the “new version format” if the system is upgraded. Moreover, when the system is downgraded, Moore discloses installing new application software or hardware.

The Office Action does not assert that Sinander and Schroder teach upgrading or downgrading software that understands both old and new persistent data structure formats. Instead, Sinander is cited by the Office Action for the mere purpose of illustrating a “two-level” software upgrade (Office Action, p. 4, item 8). Moreover, Schroder is cited by the Office Action for the mere purpose of illustrating a method of upgrading software “without traffic interruption” (Office Action, p. 5, item 8). Nevertheless, Applicants submit that neither Sinander nor Schroder teach that the

software “understands both old and new persistent data structure formats” (independent claims 1, 7, 13, and 15).

Therefore, it is Applicants’ position that the proposed combination of Moore, Sinander, and Schroder fails to teach or suggest the claimed features of “applying an upgrade to a first next level of software that understands both old and new persistent data structure formats; ... applying an upgrade to a second next level of software that understands both said old and new persistent data structure formats; ... [and] applying a downgrade to a first previous level of software that understands both said old and new persistent data structure formats” as defined in independent claims 1, 7, 13, and 15.

Further, it is Applicants’ position that dependent claims 2-5, 8-11, and 16-19 are similarly patentable, not only because of their dependency from a patentable independent claims, but also because of the additional features of the invention they defined. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections.

II. Formal Matters and Conclusion

In view of the foregoing, Applicants submit that claims 1-5, 7-11, 13, and 15-19, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary. Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0441.

Respectfully submitted,

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